

cate its trial, as in the case under the care of M. Veruenuil, as soon as the signs of the disease are distinctly recognized.

NITRITE OF AMYL.—MM. Jolyet and P. Regnard gave to the Soc. de Biologie, June 17 (rep. in *Le Progres Médical*), the results of their researches on the action of nitrite of amyl on the blood. Dr. H. C. Wood observed in 1871, that after inhalation of the drug the blood became dark and did not brighten in color by agitation with air. MM. Jolyet and Regnard have followed up this observation, and have measured the capacity for absorbing oxygen of the blood, and have found it is two-thirds less than in the normal state. It acts directly on the hæmaglobin and its action is in proportion to the quantity of hæmaglobin altered. This alteration, however, is only temporary, one of the dogs experimented upon having survived, its blood was again tested the following day, and found to be nearly normal in respect to the absorption of oxygen. The blood of another that had been killed by the experiment, was preserved in a glass vessel and tested the next day, and also found to have largely regained its capacity to absorb oxygen.

Spectroscopic examination was also made of the blood, directly after inhalation, and also on the following day. In the first examination, the two lines characteristic of oxygenated hæmaglobin were scarcely visible, and in their place was the line of hæmatine. In the second, they had re-appeared and the hæmatine line was absent.

Hence, the experimenters conclude that the vapors of nitrite of amyl act on the blood, driving out the carbonic acid and preventing the absorption of oxygen by the hæmaglobin. This action is temporary, and the effect, at least of an immediately mortal dose, is obliterated in from twelve to twenty-four hours.

XANTHIUM SPINOSUM.—Grzymala *Jour. de Thérap.* (abstr. in *Rev. des Sci. Méd.*) adds to the reputed list of antidotes for hydrophobia, by asserting that the leaves of *Xanthium spinosum* are a certain preventive of the disease, if properly administered for a sufficient period after the inoculation of the virus. He claims that in more than a hundred cases it has not failed once. It is diaphoretic and sialagogue, and has also feeble diuretic properties. It increases slightly the temperature, quickens the circulation, and occasionally produces a little headache, and even vomiting at the beginning of the treatment. The dose for an adult is about nine grains, three times a day for three weeks; for a child under eleven years, half of the adult dose may be given.

BROMOHYDRIC ACID.—Dr. J. Milner Fothergill *Brit. Med. Journal*, July 8, reports his experience with this agent. He was led to do it by a recommendation of Dr. Dewitt C. Wade in the *Peninsular Med. Journal* for February, 1875, especially in obviating the headache produced in some persons by quinine, and in the treatment of fever. Dr. Fothergill's conclusions after a year's experience are as follows. He says:

"It certainly does prevent the occurrence of headache, after each dose of quinine, in those who before had to desist from taking quinine for that reason. It is, perhaps, not invariably successful, but its power is very

marked. It also prevents the fullness felt in the head by some persons, especially those laboring under cerebral anæmia, after doses of iron. It is also useful in nervous conditions, and, with quinine, is excellent in those cases where there is much nervous exhaustion from excessive indulgence in tea or in alcohol; this being tried in a case of nervous excitability and sleeplessness, where there had been much resort to chloral hydrate.

"In forms of excited action of the heart, connected with general nervous excitability or nervous exhaustion, hydrobromic acid is most useful, given with quinine (of which it is a capital solvent) and digitalis, it gives better results than the bromide of potassium and digitalis, and is a favorite combination with me at both my hospitals, and is agreeable as well as effective. In all hysterical conditions connected with ovarian excitement, it seems to have all the properties of bromide of potassium. It is equally useful in the vomiting of pregnancy, and seems to exercise quite as powerful an influence over acts of reflex origin as does the bromide. It is especially adapted for the relief of menorrhagia associated with sexual excitement, and is, even more effective here than the bromides themselves. It is also of use in whooping-cough, and combines conveniently with quinine, forming an effective measure in this troublesome affection. With spirit of chloroform and syrup of squills, it forms a most agreeable and palatable cough mixture of no mean potency. It is also of use in cough of reflex origin. Where there is gastric irritability, it is the most useful of all acids, possessing the usual properties of acids generally and of bromine as well."

The formula of the preparation of bromohydric acid, as given, for making in quantity of two quarts is as follows: Bromide of potassium $\mathfrak{z}\text{x}$, $\mathfrak{v}\text{i}$, grs. xxviii. Dissolve in four pints of water, and add tartaric acid $\mathfrak{z}\text{iiii}$, \mathfrak{i} , grs. xxxvii. Bitartrate of potash is precipitated and the clear acid liquor is left.

The full dose is a drachm, Dr. Fothergill, usually prescribes half a drachm. He has had no experience with its use in fevers but anticipates on a *priori* ground, good effects. As said above it is recommended in these conditions by Dr. Wade.

JABORANDI.—Drs. O. Kahla and J. Soyka, of Prague, *Centralbl. f. d. Med. Wissensch.*, No. 31, publish the results of experiments as to the action of jaborandi on the heart. The animals experimented upon were dogs and rabbits, the preparations used were infusions of the leaves, injected into the veins. The results were as follows:

(1.) Small doses (5 cgm.) caused an immediate and rather transitory depression of the blood pressure, with a simultaneously appearing, and disappearing quickening of the pulse.

(2.) Larger doses (10 ccm.) have the same, but more lasting effect, but, on the other hand, the slight quickening of the pulse at the commencement, is followed by a slowing simultaneously with the rise of the blood pressure. At the same time a notable increase of the fullness of the pulse is remarked.